



# UNITED STATES PATENT AND TRADEMARK OFFICE

CP2

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,475	07/06/2005	Claudio Luis Amorim	10008.008	8196

7590 09/19/2006

Fildes & Outland  
Suite 2  
20916 Mack Avenue  
Grosse Pointe Woods, MI 48236

EXAMINER
----------

BAE, JI H

ART UNIT	PAPER NUMBER
----------	--------------

2115

DATE MAILED: 09/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/541,475

Applicant(s)

AMORIM ET AL.

Examiner

Ji H. Bae

Art Unit

2115

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

The examiner notes that there appear to be many problems in the claims, possibly due to translation. Applicant is encouraged to review the claim language and make the appropriate changes in order to correct for informalities and to employ consistent terminology for the various limitations.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 recites "cables for interconnecting the local time counters to the pulse generator module". Claim 1 also recites that the system is characterized by "multiple time counters that comprises one or more pulse generator modules." The examiner reads these limitations to mean that the pulse generator is part of the local time counter ("comprises"). As such, the cable interconnecting the local time counters to the pulse generator is understood to mean that a component of the local time counter (pulse generator) is connected to the local time counter by the cable. However, applicant's specification appears to teach that the cable is used to connect a single pulse generator module to a number of other processor in a cluster [page 3, lines 27-32].

The following is a quotation of the second paragraph of 35 U.S.C. 112:

Art Unit: 2115

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitations "the local time counters" in lines 5-6, "the processing nodes" in lines 8-9, "the pulses of the oscillator" in lines 9-10, "the hierarchy" in line 10, and "local time counters" in line 11. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of these limitations in the claim.

Additionally, in claim 1, applicant has variously recited "pulse generator modules" [lines 2-3], "local time counter modules" [line 4], "local time counters" [lines 5-6], and "modules" [line 4]. Applicant's terminology appears to be inconsistent, thus creating confusion as to what limitations are being referred to. For example, in line 4, it is unclear which "modules" are being referred to – pulse generator modules or local time counter modules. Additionally, references to local time counters lack antecedent basis since the original limitation recites "local time counter modules."

Claim 2 recites the limitations "the central oscillator" in lines 3-4, and "the cycle time" in line 4. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of these limitations in the claim or the parent.

Claim 3 recites the limitations "the propagation speed" in lines 3, and "the global clock frequency" in lines 4-5. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of these limitations in the claim or the parent.

Claim 4 recites the limitations "the processors" in line 4. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of these limitations in the

Art Unit: 2115

claim or the parent. Claim 4 also recites “a structure of hierarchical modules” in lines 2. It is noted that applicant has already recited “a hierarchical structure” in claim 1 [line 3].

Claim 5 recites the limitation “the hierarchy” in line 4. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of these limitations in the claim or the parent. Claim 4 also recites a “module” in line 4. For reasons stated in the rejection of claim 1, it is unclear what module is being referred to.

Claim 6 recites the limitations “the intermediate levels” in line 3, and “the hierarchy” in line 5. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of these limitations in the claim or the parent. Claim 4 also recites “the modules” in line 5. For reasons stated in the rejection of claim 1, it is unclear what module is being referred to.

Claim 7 recites the limitations “the intermediate modules” in line 3, and “the hierarchy” in lines 5 and 7. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of these limitations in the claim or the parent. Claim 7 also recites “the module” in line 6. For reasons stated in the rejection of claim 1, it is unclear what module is being referred to.

Claim 8 recites the limitations “the processing nodes” in lines 7-8, and “the hierarchy” in lines 4 and 6. There is insufficient antecedent basis for these limitations in the claim. There is no prior recitation of these limitations in the claim or the parent.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2115

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Parry et al., U.S.

Patent No. 5,822,381.

Regarding claim 1, Parry teaches a system of multiple time counters that comprises one or more pulse generator modules [Fig. 6], which can be interconnected in a hierarchical structure, local time counter modules [Fig. 7], cables for interconnecting the local time counters, providing simultaneous initialization of all time counters in the system upon a reset signal coming from any of the processing nodes, after which they will remain synchronized by the pulses of the oscillator in the pulse generator module at the top of the hierarchy, which will increment synchronously all local time counters [col. 1, line 66 to col. 2, line 30, lines 57-67].

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Doblar, U.S. Patent No. 6,614,862 B1;

Witsaman et al., U.S. Patent No. 5,416,808;

Cloonan et al., U.S. Patent Application Publication No. 2002/0066110 A1;

Strohmer, U.S. Patent No. 5,579,513;

Eggers et al., U.S. Patent No. 6,981,063 B1.

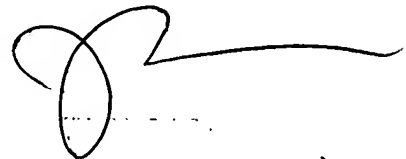
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ji H. Bae whose telephone number is 571-272-7181. The examiner can normally be reached on Monday-Friday, 10 am to 6:30 pm.

Art Unit: 2115

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ji H. Bae  
Patent Examiner  
Art Unit 2115  
[ji.bae@uspto.gov](mailto:ji.bae@uspto.gov)  
571-272-7181

A handwritten signature in black ink, consisting of a stylized 'J' and 'B' followed by a horizontal line.